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SC 06570/64-KH  
M/EB 304/64  
8 June 1964  
Copy 1

MEMORANDUM FOR: Chief, Manufacturing and Services Division, ORR

ATTENTION:

THROUGH: Chief, Requirements Branch, Reconnaissance Group, CGS

FROM: Chief, CIA/PID (NPIC)

SUBJECT: Troposcatter Antenna Search, USSR

REFERENCES: (a) Requirement C-RR-3-80,914  
(b) CIA/PID Project C 10-64  
(c) Appendix C 2/U/RU/R5-63

1. In response to your requirement dated 31 December 1963 a search was performed at 41 selected locations in the Soviet Union in an effort to locate troposcatter antennas. This search was performed with negative results. The search included nine missions with the latest date mission being  and proceeding back to the last report on this subject (see SC 07298/63-KH, "Search for Tropospheric Antennas," 29 Aug 63, TOP SECRET  Missions involved in this report are:

2. Eighteen of the 41 locations were totally or partially covered by reasonably large scale (KH-7) photography. Most of these 18 locations were accurately located by geographic or UTM grid coordinates which were supplied with the requirement. The KH-7 photography was of sufficient quality and scale to identify vehicles, radars, and in most cases stick masts. Any troposcatter antennas present on this photography would have been identified. It is doubtful that tropospheric antennas, which might have been present on the smaller scale KH-4 photography, could be identified without some knowledge of "site signatures" which must be derived from larger scale comparative photography.

3. The enclosed table lists the sites in order by name and their numerical designator. It indicates the coverage by mission and the limiting degrees of the photography due to the weather and quality. It also gives, by reference to the appropriate subparagraph, a short description of the vicinity of each search area which was covered by usable photography.

Reviewed by NGA.

S-13200

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GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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The following abbreviations are keyed to the enclosed table:

NC - Not covered by photography  
CC - Cloud covered  
SC - Scattered clouds to heavy clouds  
H - Haze  
PIQ - Poor Image Quality (Uninterpretable)

4. a. Zhigansk (2202) 66-40N 123-26E  
[ ] TALL KING and two probable u/i radar identified.  
Square clearing (graded area) in vicinity of coordinates.  
No troposcatter identified within 20 nautical mile area.
- b. Sangar (2204) 63-55N 127-31E  
[ ] TALL KING identified  
No troposcatter observed within a 20 nautical mile area.
- c. Yakutsk (2205) 62-00N 129-40E  
No coordinates given in referenced document (c).  
No troposcatter observed within a 20 nautical mile area.
- d. Salekhard (3301) 66-33N 66-40E  
[ ] No stereo, no troposcatter observed in a 20 nautical mile area.  
No coordinates given for site in referenced document (c).
- e. Mys Kamennyj (3302) 68-32N 73-24E  
[ ] No troposcatter observed in a 20 nautical mile area.  
Interpretation limited due to haze and poor quality.
- f. Dudinka 69-25N 86-15E  
[ ] No man-made features in area of grid coordinates.  
Grid coordinate and geographic coordinates plot at separate positions (c).  
[ ] Town and area north of town open. South of town 100 percent cloud covered.
- g. Khatanga (3306) 71-57N 102-39E  
[ ] One TALL KING and at least two other radar observed.  
Also antenna field, probable rhombics.  
[ ] Town identified only. No suspect troposcatter sites within 20 nautical mile radius.

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- h. Mys Kosistyj (3307) 73-33N 110-21E  
[ ] One very tall tower and two smaller towers in general area.  
Search area not completely covered.
- i. Tiksi (3310) 71-38N 128-45E  
[ ] Coordinates plot in center of antenna field.  
Two antenna fields, one rhombic, one probable fishbone.
- j. Svyatoj Nos (3311) 72-50N 140-51E  
[ ] No man-made features observed within a 20 nautical mile radius of referenced coordinates (c).
- k. Allaikha (3313) 70-31N 147-16E  
[ ] Village only in vicinity of coordinates (c).
- l. Sredene Kolymsk (3315) 67-30E 154-02E  
[ ] Nothing present at referenced coordinates (c).  
No troposcatter suspect site within a 20 nautical mile radius of the town.
- m. Nizhne Kresty 68-45N 161-18E  
No geographic or grid coordinates given. No suspect sites within a 20 nautical mile radius of town.
- n. Perek 69-42N 170-17E  
[ ] No suspect site in vicinity of town. Photography hazy.  
[ ] No man-made objects in the immediate vicinity of grid coordinates. Suspect site located at approximately 69-54N 170-45E. However, site shows no apparent change since [ ]  
An annotated print of this site is enclosed with this report.
- o. Mys Shmidt (3318) 68-52N 179-32W  
[ ] Probable TALL KING, BARLOCK-type radar, one unidentified radar and an antenna field observed in area.  
One rectangular gable-roof building and a small gable-roof building, both partially snow covered in vicinity of grid coordinates.  
[ ] No man-made features within 20 nautical mile radius of coordinates.
- p. Vankarem (3319) 67-51N 175-50W  
[ ] TALL KING and a probable unidentified radar near town.  
Grid coordinates plot on or very near two prominent, flat knobs suitable for deployment of troposcatter antennas. However, no man-made features are in area.  
[ ] No man-made features within a 20 nautical mile radius of village.

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- q. Provideniya (3320) 64-23N 173-18W  
[ ] No troposcatter antenna observed in a very limited area.
- r. Uel'Kal' (4401) 65-32N 179-17W  
[ ] New TALL KING, BARLOCK-type radar, and one unidentified radar near village.  
No man-made features in vicinity of referenced grid coordinates.
- s. Anadyr (4402) 64-55N 177-29E  
[ ] Probable rhombic field and probable fishbone array observed in vicinity.  
Grid coordinates plot in ONEMEN bay (c).  
[ ] No suspect sites observed.
- t. Markovo (4404) 64-40N 170-25E  
[ ] Nothing man-made within a 20 nautical mile area outside of the vicinity of the town.  
No coordinates provided in referenced document (c).
- u. Slavutnoe (4405) 63-11N 167-51E  
[ ] Two suspect structures north of town.  
20x enlargement provided.  
No other suspect activity within a 20 nautical mile radius of village.  
No coordinates provided in referenced document (c).
- v. Kamenskoe (4406) 62-30N 165-10E  
[ ] No troposcatter antenna observed on available photo coverage except village of Kamenskoe.  
No coordinates provided in referenced document (c).
- w. Magadan (4409) 59-34N 150-48E  
[ ] One BARLOCK-type radar, one unidentified radar, a possible thick eight, and a possible bore sighting tower or microwave tower were the only electronics observed.  
[ ] No suspect sites observed within a 20 nautical mile radius of tower.  
No coordinates provided in referenced document (c).
- x. Okhotsk (4410) 59-25N 143-24E  
[ ] Nothing observed within general vicinity of grid coordinates.  
Very limited search area, which included town.

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- X1
- y. Ynykchan (unknown). 60-15N 137-43E  
 Only area east of village covered. No man-made features observed.  
No coordinates provided in referenced document (c).
- X1
- z. Enisejsk (8809) 58-24N 91-59E  
 No troposcatter antenna observed in very limited area, on non-stereo coverage.  
 No man-made features observed in immediate vicinity of geographic coordinates. FLIM FLAM station is only electronic facility discernible.
- X1
5. a. Mytishchi  
 Stereo coverage revealed no troposcatter.  
Scale may preclude identification.
- X1
- b. Babynino Area  
 Good quality, stereo photography revealed no suspect troposcatter sites between Babynino and Kalvga/Oreshkovo airfield.
- X1
- c. Kosaya Gora  
 Fair quality, stereo photography revealed no suspect troposcatter sites in the vicinity of Kosaya Gora Iron Works.
- X1
- d. Orel Airfield  
 Good quality, non-stereo photography of the airfield revealed no suspect troposcatter sites.  
 Good quality, stereo photography revealed no troposcatter sites.
- X1
- e. Gagra (Gagra)  
 Good quality coverage of a limited area revealed no troposcatter site. Town not covered.  
 Good quality coverage of a very limited area due to clouds.
- X1
- f. Baku  
 Area located at extreme edge of frame. No stereo due to forward camera light struck. No suspect troposcatter sites observed.  
 Town only covered due to clouds. No suspect troposcatter sites observed.

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g. Krasnovodsk

[ ] Very limited area of coverage. BARLOCK-type radar and an enclosed antenna field located near airfield. No suspect troposcatter site observed.

6. The photo analyst on this project is [ ] who may be contacted on [ ] should you have any further questions concerning this project.

7. This project is considered to be [ ]

Enclosures:

- 1 - Attachments 1 thru 7 to Requirement C-RR-3-80,914
- 2 - Table
- 3 - Two (2) annotated prints  
Slavutnoye (CIA/PID/MEB-P-492/64)  
Pevek (CIA/PID/MEB-P-493/64)

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Attachment to: S25670/64-KH  
M25X04/64

Name No.									
Dzhardzhan 2201	NC	NC	NC	NC	NC	NC	NC	NC	NC
Zhigansk 2202	PIQ	Paragraph 4a	NC	Paragraph 4a	NC	NC	NC	NC	NC
Sangar 2204	Paragraph 4b	NC	NC	Paragraph 4b	NC	NC	NC	NC	NC
Yakutsk 2205	NC	NC	NC	Paragraph 4c	H	NC	NC	NC	NC
Salekhard 3301	NC	NC	NC	Paragraph 4d	NC	NC	NC	NC	NC
Mys Kamennyj 3302	NC	NC	NC	Paragraph 4e	NC	NC	NC	NC	NC
Antipayuta 3303	NC	H	NC	NC	NC	NC	NC	NC	CC
Dudinka 3304	CC	Paragraph 4f	NC	NC	NC	NC	CC	NC	Paragraph 4f
Khatanga 3306	Paragraph 4g	Paragraph 4g	Paragraph 4g	NC	NC	NC	CC	NC	CC
Mys Kosistyj 3307	Paragraph 4h	Paragraph 4h	NC	NC	NC	NC	NC	NC	CC
Tajmylyr 3309	NC	NC	NC	NC	NC	NC	NC	NC	CC
Tiksi 3310	Paragraph 4i	PIQ	NC	H, SC	NC	NC	NC	NC	CC

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25X1



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Name No.									
Svyatoj Nos 3311	NC	NC	NC	Paragraph 4j	NC	NC	Paragraph 4j	NC	NC
Allajkha 3313	Paragraph 4k	Paragraph 4k	NC	CC	NC	NC	CC	NC	NC
Sredne Kolymsk 3315	Paragraph 4l	NC	NC	Paragraph	NC	NC	NC	NC	NC
Nizhnie Kresty 3316	NC	Paragraph 4m	Paragraph 4m	NC	NC	NC	NC	CC	NC
Perek 3317	NC	Paragraph 4n	NC	Paragraph 4n	NC	NC	NC	NC	CC
Mys Shmidt 3318	Paragraph 4o	Paragraph 4o	Paragraph 4o	NC	NC	NC	SC, PIQ	NC	CC
Vankarem 3319	Paragraph 4p	NC	Paragraph 4p	NC	NC	NC	CC	NC	CC
Provideniya 3320	NC	Paragraph 4q	NC	NC	NC	NC	NC	NC	H, PIQ
Uel 'Kal' 4401	Paragraph 4r	NC	NC	Paragraph 4r	NC	NC	NC	NC	PIQ
Anadyr 4402	Paragraph 4s	Paragraph 4s	NC	Paragraph 4s	NC	NC	NC	NC	NC
Markovo 4404	NC	NC	Paragraph 4t	NC	NC	NC	NC	NC	NC
Slavutnoe 4405	NC	NC	Paragraph 4u	NC	NC	NC	NC	NC	NC

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Name No.									
Kamenskoe 4406	NC	Paragraph 4v	NC	NC	NC	NC	NC	NC	NC
Gizhiga 4407	NC	NC	NC	CC	NC	NC	NC	NC	NC
Magadan 4409	Paragraph 4w	NC	Paragraph 4w	CC	Paragraph 4w	NC	NC	NC	NC
Okhotsk 4410	Paragraph 4x	Paragraph 4x	CC	NC	NC	NC	NC	NC	NC
Ynykchan unknown	NC	Paragraph 4y	NC	CC	NC	NC	NC	NC	NC
Ust'Maya unknown	NC	NC	NC	NC	H, PIQ	NC	NC	NC	NC
Enisejsk 8809	NC	Paragraph 4z	Paragraph 4z	NC	Paragraph 4z	NC	NC	Paragraph 4z	NC
Turukhansk 8813	NC	NC	NC	NC	NC	NC	NC	NC	NC
Petrozavodsk unknown	NC	NC	NC	NC	CC	NC	NC	NC	NC
Leningrad unknown	NC	NC	SC	NC	NC	NC	PIQ	NC	CC
Mytishchi unknown	NC	NC	NC	Paragraph 5a	CC or NC	NC	PIQ	NC	CC
Babynino unknown	NC	NC	Paragraph 5b	NC	NC	NC	Paragraph 5b	NC	PIQ

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Name No.									
Kosaya Gora unknown	NC	NC	Paragraph 5c	Paragraph 5c	NC	NC	NC	NC	CC or NC
Orel unknown	Paragraph 5d	NC	Paragraph 5d	NC	NC	NC	CC or NC	NC	CC or NC
Gabra unknown	NC	NC	NC	NC	NC	NC	NC	Paragraph 5e	Paragraph 5e
Baku unknown	NC	NC	NC	NC	NC	NC	Paragraph 5f	NC	Paragraph 5f
Krasnovodsk unknown	Paragraph 5g	NC	NC	NC	NC	NC	NC	NC	CC

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SUSPECT SITE

SLAVUTNOYE

TOP SECRET

TOP SECRET

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SUSPECT SITE

FEVER  
17mm

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